

Scott,

I have a poster to present for the Water Quality Conference at Boise in October 2004. The poster abstract below is for a project completed that relates to several of the Conference Topics mentioned in the RFP including Nutrient Management, Dairy Wastes, Sustainable Ag, and some would even relate it to Remediation (of high soil test P fields). Let me know what the committee thinks.

Title: Phosphorus Removal with a Double Crop Forage System  
Organization: University of Idaho  
Mailing Address: 29603 U of I Lane, Parma, ID 83660  
Phone: 208-722-6701 Ext. 216  
Fax: 208-722-6701  
E-mail: [bradb@uidaho.edu](mailto:bradb@uidaho.edu)

### ***Abstract***

Maximizing phosphorus (P) removal with cropping can increase statutory animal waste loading rates. The potential for increased P removal with a winter cereal/corn silage double crop forage system was evaluated in a three year study conducted at the Parma Research and Extension Center in a Greenleaf-Owyhee silt loam. The study involved three winter (barley, wheat, and triticale) and two spring cereals (wheat and triticale) all fall planted at three seeding rates (100, 150, or 200 lb/A) and then followed with a crop of silage corn. Winter forages were harvested at the boot stage. Seeding rates of 150 lb per acre were often necessary for maximizing winter forage dry matter production and P removal. Winter triticale was the most productive winter forage producing 8.8 tons per acre of dry mass and removing 59 lb P per acre over the three years. Total P removal after three years with double cropping winter triticale and corn exceeded P removal with single crop corn by 42% or 50 lb P per acre over the three year period (169 vs 119lb P per acre). Soil test P after three years was reduced 5.7ppm more with double cropping than with a single corn crop. Double cropping winter forages and corn can increase the animal waste loading capacity of soils or hasten the decline in soil test P resulting from excessive P applied in the past.